

4. *ATTACUS ATLAS*, L. 1 ♂.

The vitreous spot of the fore wing with a very obtuse angle towards the costa; exterior angle acuminate, interior side convex, exterior side concave; the vitreous accessory spot small, lineal, along the middle hardly transparent, not reaching the outer cross band. The vitreous spot of the hind wing forms nearly a regular triangle, the posterior margin of which is rather sinuated.

There are now 25 species of Butterflies known from Timorlaut, no doubt only a small part of those there existing.

## 3. Notes on Peruvian Birds. By Prof. W. NATION, C.M.Z.S.

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1. *PETROCHELIDON RUFICOLLIS* (Peale).

Some twenty years ago an American engineer, engaged by the Peruvian Government to survey the Andean valleys and coasts of Peru for railway routes, showed me a letter from his friend the late Mr. John Cassin, requesting him to examine carefully the rocks and cliffs for a Swallow's nest. He informed me that he had searched for it for two or three years without success.

Many years after, when the subject of Mr. Cassin's letter had almost escaped my memory, being in the National Library of Lima, looking over some books which had just arrived, I found the two volumes of Birds of the U. S. Exploring Expedition, and saw the description of the Swallows obtained by Peale, near Callao, in, I think, 1835, and named by him *Hirundo ruficollis*. With this information I recommenced my search for it.

One would naturally suppose that if a Crag-Martin had been found in Western Peru, its breeding place would be found in one of the Andean valleys, where everything necessary for its economy abounds. Such at least was my impression; and from this error I lost many years in searching for it in places which it rarely or perhaps never visits.

At length, in 1877, tired and fatigued by a long ramble over the hot sandy hills of the neighbourhood of Lima, I came to some old ruins of a brick- or lime-works, so old that the ditches that had once supplied it with water had in many places disappeared; it must have been abandoned for a quarter of a century at least. Here, while sitting down inside the old kiln, I observed a bit of earth adhering to the wall; on removing it and blowing away carefully the loose particles of dust, I saw that it was composed of pellets, and that these pellets could not have been formed by any insect. I felt convinced that I had discovered the object of so many fatiguing journeys. Every rock, wall, and building near the ruins was carefully examined by me; and in the course of the day, about twelve miles from the city I fell in with a large colony of Cliff-Swallows.

On the following day I returned with a man and a ladder. The house which this bird had selected for its breeding place was a

little Gothic building used for a telegraph and railway station, so near the line that I observed that the nests were surrounded by the smoke of the engine. The man in charge of the station informed me that the building had been scarcely finished before it was taken possession of by the colony. In the neighbourhood there was a large sugar plantation with many buildings, of which the roofs and walls had been taken possession of by *Attilora cyanoleuca*, but not a nest of the Cliff-Swallow could be seen on them. On examining the nests, I found them in every stage of construction, from the first circular row of wet pellets to the perfect nest inhabited by a family of young birds nearly fledged. On the outside (for the roofs inside had been taken possession of also) I counted 123 nests. The rafters under the eaves were covered by the nests in many places. The nests were placed one upon another. The sill of one window had a row of nests upon it; and I observed one or two nests affixed to the sides of the walls of the house.

The nest is very large for so small a bird. The one I removed weighs two pounds; it stands 7 inches high, and is  $6\frac{1}{2}$  inches wide at the base. The neck is about  $2\frac{1}{2}$  inches long and 2 wide. The lining is very scanty, scarcely sufficient to cover the bottom of the nest, and is composed of a few bits of fine grasses with one or two feathers. The eggs which I found in this nest, in which incubation had many days commenced, were three in number, white, thickly speckled with reddish-brown; they are ten twelfths of an inch long by seven broad.

I never saw anything more beautiful than the appearance of a colony of these birds in their curious-shaped nests, out of which project the heads of the owners at the slightest alarm. It is by no means a shy bird; while I was examining the nests they flew around me like bees, almost touching my face, uttering piteous cries. I felt sorry to see the distress of the parent birds whose nest I removed.

Of the nest I brought away I made a drawing, and sent copies of it to almost every part of Peru, and in a short time I was in possession of many important facts respecting its range in Peru. Unfortunately about this time difficulties between Chili and Peru commenced, and soon after broke out the terrible war of the Pacific. Personal observations and postal inquiries became impossible. Since the departure of the Chilean army and the return of the Peruvian authorities, I have done all I could to add to my knowledge of its range and habits; but I regret to say with little success. The colony I first discovered was swept away; the bones of many of my friends are laid under the battle-field; and the state of the country renders it unsafe to stray far from the city gates.

According to my present knowledge of this species it seems to be confined to the cultivated lands in the river-districts of the narrow strips of arid country situated between the Pacific and the mouths of the Andean valleys, from the southern border of the great desert of Sechura to the desert of Ica, from about  $7^{\circ}$  to  $13^{\circ}$  S. latitude. It is remarkable that I have never been able to obtain any evidence that it builds its nest on a rock or cliff, or that it is seen inside the

mouth of the Andean valleys. The nest is always found on human habitations. In the vicinity of Lima and within twelve miles of the walls there are at present fourteen colonies.

I hope to give a fuller account of this interesting species soon.

## 2. PSITTACULA ANDICOLA, Finsch.

This robust little mountain Parrot, which seems to be peculiar to the higher parts of the Western valleys of Peru, is found in the valley of the Rimac wherever vegetation can be seen on the mountain-sides. It associates in parties of from 5 to 50 individuals; when disturbed flies to a short distance, and generally alights upon a bush of the greenish foliage.

In its habits it resembles so much the common coast species (*Brotogeris aurifrons*) that I have always considered it, whenever I have seen it feeding in its habitat, to be of the same species. Mr. Dallas mistook it for *B. aurifrons* also, and sent me excuses for sending such a common bird. It is remarkable that two Parrots specifically and generically distinct should resemble each other so closely in colour, form, and habit, and inhabit, one the lower part of a valley, and the other the upper part of it. The tail of this species is very peculiar. My first impression, on seeing it, was that the two middle tail-feathers had been lost. The wing also seemed to be disproportionally long. These striking peculiarities are lost in the most carefully prepared skin; whilst dissecting it I observed that the skin (not as observed in any other Parrot) was quite green on both surfaces. Irides black; bill yellowish green.

Total length  $6\frac{6}{10}$  inches, wing  $4\frac{4}{10}$ .

[Two skins of this species forwarded to me by Prof. Nation agree well with others in my collection from Paucartambo (*Whitely*) and Punamarca (*Jelski*). Cf. P. Z. S. 1874, p. 679.—P. L. S.]

## 3. CYPSELUS ANDICOLA.

This beautiful Swift inhabits the western valleys of the Peruvian Andes from 6000 feet to 13,000. Mr. Dallas found large flocks of this species flying over meadows at 8000 feet, in October 1883. In February 1884 it had disappeared from the place where it was found by Mr. Dallas, and was seen at 13,000 feet in the same valley. All the birds found near the Cordillera during warmer months of the year descend the valleys on the approach of winter.

My present knowledge of this bird is very imperfect: I have traced it in the western valley of the Andes more than 300 miles to the south of Lima and a little more on the north. I have also discovered that it is found on the other side of the Andes, and that it breeds at high altitudes under the eaves of houses. I have written to a German gentleman, under the roof of whose house it is said to build its nest, to send me an account of its habits; but I have received no answer yet. Bill black; irides black.

Total length  $5\frac{6}{10}$  inches; wing  $5\frac{9}{10}$ .

[I have previously only seen examples of this fine Swift from as far north as Arequipa and Tinta in Peru (P. Z. S. 1868, p. 569). Mr. Nation's skin agrees with *Whitely's* specimens.—P. L. S.]